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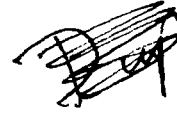
# STATE OF COLORADO

Roy Romer, Governor  
Patti Shwayder, Acting Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
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and Environment

**TO** Governor Roy Romer  
Patti Shwayder, Acting Executive Director CDPHE

**FROM** J. David Holm, Director WQCD

**DATE** February 7, 1996

**SUBJECT** CONSENT AGREEMENT BETWEEN SUNNYSIDE GOLD CORPORATION  
AND WATER QUALITY CONTROL DIVISION

*Casey's file*

## BACKGROUND

Sunnyside Gold Corporation ("SGC") and the Water Quality Control Division ("WQCD") have been involved in private negotiations to resolve a law suit SGC filed in May of 1994. Through its legal action, SGC was seeking a Declaratory Judgement in State District Court that any seeps and springs which might develop following closure (i.e. bulkhead sealing) of the American and Terry Mine Tunnels would not be point source discharges subject to the NPDES permitting system. These tunnels provided for access to the mine workings, mine drainage and ore haulage from the Sunnyside Gold Mine, located approximately 7 miles north (upstream) of Silverton. A major motivation for the prolonged period of negotiation was our perception that the results of litigation would be undesirable, regardless of the outcome. If SGC prevailed, mining companies could "plug and run" even if the geologic conditions were inappropriate for mine plugs and water quality worsened significantly after closure. If WQCD prevailed, there would be no situation where mine plugging would make sense because a discrete source of pollutants which could "easily" be treated might be transformed into a multitude of diffuse sources which would require treatment.

Also since 1994, a group of local, state, and federal officials, mining industry representatives, environmentalists and interested citizens known as the "Animas River Stakeholders" (ARS), has been working toward achieving water quality improvement in the Upper Animas Basin (above Silverton). This watershed has been heavily impacted by past mining activities and natural mineralization. Any agreement we reach with SGC will be closely scrutinized by the ARS group and others including EPA and the larger mining industry.

## PROPOSED AGREEMENT

The basic concept for the agreement is that SGC will mitigate (remediate) discharges from inactive mines in the tributaries of the Animas River upstream of Silverton in order to fully compensate for any water quality problems attributable to seeps and springs following mine closure. The success of the mitigation projects will be measured at a point, in the Animas River just downstream of Silverton. Both parties have agreed that zinc concentration will be used as the indicator water quality parameter to assure water quality is protected during and after the agreement is in place. In order for the agreement to be successfully completed, zinc concentrations below Silverton will be compared

statistically to baseline (pre-closure) zinc concentrations to determine that water quality has not deteriorated.

SGC will first plug the American and Terry Tunnels and then begin to divert and treat water from Cement Creek at the American Tunnel treatment plant. This will create a water quality "cushion" to protect the Animas River during the remediation work. SGC will then complete all the projects on the "A" List, which include: filling the Sunnyside Mine with alkaline water; remediation of the mine waste dump at the south fork of Cement Creek; remediation of the surface tailings at the Eureka townsite; remediation of mine waste and closure of the bulkhead at the Gold Prince Mine; removal of the Boulder Creek Mill tailings; removal of the Pride of the West tailings; and, remediation of the Koehler and Longfellow mine waste piles. In addition, SGC will perform a bench scale study regarding the treatability of mine drainage discharging from the Koehler and Longfellow portals. Finally, SGC will provide a grant to the state of \$200,000 to be used for future remediation efforts in the Upper Animas Basin.

After the mine pool has come into physical equilibrium and following completion of the A-list projects, the agreement will have been successfully completed if a statistical analysis shows that water quality at the reference point has not deteriorated. If water quality criteria are not met, SGC can complete additional projects on the "B" List and other projects to remove more zinc from the system.

Once the agreement is successfully completed, SGC's discharge permits for the American and Terry Tunnels will be terminated and SGC will have no future liability in the basin for any seeps and springs that result from the portal plugging. If the agreement is prematurely terminated, SGC and the Division will return to court in order to resolve the legal issues brought forth in SGC's law suit. SGC will treat any flows from the American Tunnel and the flow of Cement Creek up to the treatment plant's capacity for a period of up to 30 months during this litigation. If the agreement is prematurely terminated and SGC discontinues treatment and becomes bankrupt, the Division will be able to continue treatment during litigation by drawing on a financial surety provided by SGC. Our proposal is that the form of the financial surety will be a letter of credit from a highly rated financial institution in the amount of \$5 million in order to provide sufficient funds for treatment operations for a period of at least five years.

During the term of the agreement, SGC will continue to be bound by its discharge permits and Mined Land Reclamation permit, including the monitoring requirements. This agreement will be reflected in a Consent Decree that will resolve the SGC law suit without addressing the legal issues still in dispute.

## DISCUSSION

This agreement is designed, at a minimum, to maintain water quality in the Upper Animas Basin. Simply locking in the improvements in water quality brought about through SGC's active treatment operations following closure of the mine, would be a significant achievement. Before SGC assumed operations at the Sunnyside Mine in 1986, Standard Metals was discharging nearly 100 pounds of zinc per day from the mine. Today, the existing quality of the Animas River below Silverton depends upon SGC discharging only 4 pounds of zinc per day. The A list (and, if necessary, B list) mitigation projects will preserve this gain in water quality.

This agreement provides one model for inactivating NPDES permits for major mining operations with very large discharges. This type of "trade" is unprecedented as far as we know. EPA seems willing to stand aside and allow this agreement to go forward perhaps even providing some encouragement. Echo Bay Mining Ltd. is the parent company of SGC and is underwriting the costs associated with

SGC's ongoing operations and this agreement. Both Echo Bay and SGC are exemplary mining companies with top notch personnel who have demonstrated a commitment to quality, follow-through and performance even in the face of financial losses at the Sunnyside Mine.

There are risks being taken by both parties in this agreement. The state is assuming the risk that water quality could deteriorate sometime after the agreement has been terminated successfully by SGC 7-10 years from now. This outcome would be highly visible and might be perceived as a serious failure in our environmental protection responsibilities. However, it is impossible to prospectively quantify the residual loading from the mine following closure and the exact loading removals which will be achieved by the A list projects. On the other hand, SGC is committed to perform all of the projects on the A list even if they result in an improvement in water quality in the Upper Animas Basin. Also, if SGC determines that the agreement can not be terminated successfully, it must, nevertheless, complete the A list projects (at great cost) and still risk an adverse legal determination by the District Court, thereby becoming subject to perpetual treatment responsibilities.

This agreement has been won at great cost in money, time and effort on both sides. The parties owe a debt of gratitude to Stuart Bliss and Pat Teegarden for their constructive facilitation of the negotiation process, which was strained at times during the final several months.

## **SUMMARY OF AGREEMENT BETWEEN SUNNYSIDE GOLD CORPORATION AND WATER QUALITY CONTROL DIVISION**

Sunnyside Gold Corporation's ("SGC") final reclamation plan for the Sunnyside Mine includes installation of bulkheads in the American and Terry Tunnels. These tunnels have discharge permits issued by the Colorado Water Quality Control Division ("Division"). Once valves are closed in the installed seals SGC and the Division disagree whether any seeps and springs resulting from filling the mine would be point source discharges of pollutants, subject to permits. SGC sued the Division, asking the state court to decide. In order to settle this dispute and to protect the water quality in the Animas River, SGC and the Division propose to mitigate historic water impacts and mine waste at several inactive mines in order to offset for any water quality problems attributable to seeps and springs which may result from mine closure. This settlement is reflected in a Consent Decree that will be ordered by the court.

The success of the mitigation program will be measured at the water quality reference point, in the Animas River below its confluence with Mineral Creek, downstream of Silverton (water quality monitoring station A-72). Both parties have agreed that the concentration of dissolved zinc is the indicator water quality parameter that will be used to assure water quality is protected. In order for the agreement to be successfully completed, the water quality (dissolved zinc) at A-72 will be compared statistically to baseline water quality data to determine if it has deteriorated.

SGC will first plug the American and Terry Tunnels and then begin to divert and treat water from Cement Creek at the American Tunnel treatment plant. This will create a water quality "cushion" to protect the Animas River during the mitigation work. SGC will then complete all the projects on the "A" List, which include: filling the mine with alkaline water; removal of the mine waste dump at the south fork of Cement Creek; removal of the surface tailings at the Eureka townsite; mitigation of surface mine wastes and installation of a bulkhead at the Gold Prince Mine; and mitigation at the Koehler Longfellow Mine site. After the mine pool has come into physical equilibrium and following completion of the A-list projects a period of post mitigation sampling occurs. The general agreement will have been successfully completed if a statistical analysis shows that water quality at the reference point has not deteriorated. If water quality criteria are not met, SGC can complete projects on the "B" List and other projects to remove more zinc from the system. These projects include mitigation of the Boulder Creek Mill tailings; Pride of the West tailings, closure of the Columbus Mine portal, and closure of the London Mine portal. The projects listed involving third parties will require the owners approval prior to work starting.

Once the agreement is successfully completed, SGC's discharge permits for the American and Terry Tunnels will be terminated and SGC will have no future liability in the basin for any seeps and springs that result from the portal plugging. If the agreement is prematurely terminated, SGC and the Division will return to court, and for 30 months, SGC will treat any flows from the American Tunnel and the flow of Cement Creek up to their treatment plant capacity. If the agreement is prematurely terminated and SGC discontinues treatment as a result of bankruptcy, the Division will be able to continue treatment during litigation by drawing on a financial surety provided by SGC.

During the term of the agreement, SGC will continue to be bound by its discharge permits and Mined Land Reclamation permit, including the monitoring requirements. In addition to those monitoring requirements, SGC will monitor dissolved metals, sulfate, hardness and pH at A-72, and where possible at, above and below four mitigation sites (Koehler Longfellow, Gold Prince Mine, Columbus Mine, and London Mine), three stream mouth locations (Animas River above its confluence with Cement Creek, mouth of Cement Creek, mouth of Mineral Creek) and other locations within the Animas River Basin.